

THE RIO NEWS.

PUBLISHED ON THE 5th, 15th AND 24th OF EVERY MONTH.

VOL. VII.

RIO DE JANEIRO, JUNE 24TH, 1880

NUMBER 18

OFFICIAL DIRECTORY

AMERICAN LEGATION—22, Rua do Marquês d'Almeida.
HON. HENRY W. HILLIARD,
Minister.
BRITISH LEGATION—Hôtel des Etrangers.
FRANCIS CLARE FORD,
Minister.
AMERICAN CONSULATE GENERAL—No. 30 Rua do
Visconde de Iguazu.
THOMAS ADAMSON,
Consul General.
BRITISH CONSULATE GENERAL—No. 3, Rua da
Alfândega.
GEORGE THORNE RICKETTS,
Consul General.

CHURCH DIRECTORY

ENGLISH CHURCH.—Rua do Evaristo da Veiga. Services
at 11 o'clock, a.m., and 7 o'clock, p.m., every Sunday.
FRANK RICKY YOUNG, M. A.,
Pastor.
PRESBYTERIAN CHURCH.—No. 15, Travessa da Ilha.
Services in Portuguese at 11 o'clock, a.m., and 7 o'clock,
p.m., every Sunday; and at 9 o'clock, p.m., every
Thursday.
JAMES T. HOUSTON,
Pastor.
METHODIST CHURCH.—No. 45, Rua Bello da Princesa, up
stairs. Services in English at 11 o'clock, a.m., on Sundays,
and at 7:30 o'clock, p.m., Fridays. J. J. RAMSON,
Pastor.
SAILORS MISSION.—163, Rua da Saúde; 3rd floor. Ser-
vices at 9 p.m., every Sunday.
FRANCIS CURRAN,
Missionary.

PINHEIRO & TROUT
SHIP-CHANDLERS & GROCERS
107, RUA PRIMEIRO DE MARÇO.

DULLEY, MILLER & BRUNTON,
IMPORTERS OF
MERCHANTS.
SANTOS and São Paulo.

PALM & ALLEN,
SHIP-CHANDLERS.
5—Rua Fresca—5
RIO DE JANEIRO.

CARSON'S HOTEL
160 RUA DO CATETE
WM. D. CARSON, Proprietor.

JAMES E. WARD & Co.
General Shipping and Commission Merchants
113 WALL STREET
NEW YORK

DR. ANDREW J. INGLIS
AMERICAN DENTIST
May be found in his office, Rua do Ouvidor, No. 48, from 9
a.m. until 4 p.m. Established upwards of twenty years in this
city.

**NEW-YORK AND BRAZIL
EXPRESS**
Receive and forward parcels to and from Rio de Janeiro
and New-York.
Office in New-York, No. 39, Burling Slip.
Office in Rio de Janeiro, No. 8, Rua São Paulo.

PHILADELPHIA—1876
EXPOSITION MEDAL
MARC FÉRRÉZ'S
BRAZILIAN PHOTOGRAPHS

M. Ferréz was photographer to the Geological Survey of
Brazil and received a medal at Philadelphia for the views
taken while in that service.
Brazilian scenery a speciality
88 RUA DE S. JOSÉ

BLAIR Irmãos & Co.
IMPORTERS OF
AMERICAN GOODS

Keep constantly on hand a stock of the following articles of
American goods: Blue, white and fancy colored flannels,
cassimeres, blankets, silk and cotton thread, latest styles of
ladies' hats, collars, cuffs and jewelry, fancy toilet soap, perfu-
mery, laundry starch, improved washing compound, mazzins,
biscuits, baking soda, pickles in glass jars, relish sauces,
condensed and Christmas candles in sealed glass jars, paper
handkerchiefs, handkerchiefs, matches, patent cutlery, hand
sawing machines, umbrellas, brushes of all kinds, stationery
goods, ink, books, Faber's pens and pencils, penholders,
rubber bands, paper cutters, printing presses, kitchen stoves,
carpeting, tools, plumbers' materials, circular saws, saw
clamps, saw sets, chairs and office furniture.

43 RUA DA ALFÂNDEGA 43
RIO DE JANEIRO

REVISTA DE ENGENHARIA.
(PORTUGUESE)
The only Engineering Review published in Brazil.

Devoted to the interests of Brazilian engineers and engineer-
ing enterprises, and to all co-ordinate subjects which aid in the
industrial development of the country.
It contains a full record of all concessions granted by the
Government, and of their administration and completion.
Owing to its large circulation among engineers in all parts of
the empire, it will be found a valuable advertising medium.

Published monthly.
Terms—One year 12,000
Six months 6,000
Each number 500
Advertising terms furnished on application.
Address: Redação da
REVISTA DE ENGENHARIA,
No. 28 Rua de Gonçalves Dias
Rio de Janeiro.
C.C. Soares, No. 41.

THE PEDREGULHO RESERVOIRS.

The special commission composed of the
engineers Messrs W. Milnor Roberts, J. J.
Rey, A. Victor de Borja Castro, and André
Rebouças, appointed by the minister of
agriculture to examine the Pedregulho reser-
voirs, presented its report on the 6th
instant. Not having been able to agree
as to the causes of the late accident to the
lower reservoir the members of the commis-
sion presented their individual hypotheses of
that matter separately, but agreed as to the
measures which should be taken to remedy
it. They agreed that the two reservoirs
should be rendered perfectly impermeable
and that the ground upon which they stand
should be thoroughly drained, both superfi-
cially and deeply, in order to prevent all
infiltrations. This being done according
to the most approved scientific methods and
some works being executed to strengthen
the walls, the commission is of opinion
that the reservoirs will then fulfill the end
for which they were constructed. They all
unite in the opinion that the water should
not be let into them until they are finally
and satisfactorily finished. After receiving
this report the minister of agriculture called
a consultation of engineers, including the
members of the commission, for the purpose
of learning their opinions on the causes
of the accident, the means of repairing it
and of avoiding others, and drainage.
Besides the members of the commission
above named, there were present Messrs.
Bento José de Sobragy, Jeronymo R. de
Moraes Jardim, Honorio Bicalho, Luiz
Francisco Monteiro de Barros, Domingos
José Rodrigues and Raymundo Teixeira
Belfort Roxo.

Dr. Sobragy said that he did not consider
the accident to be of a grave nature. The
fact that the works were incomplete and
that the completed parts were still new
and unequally matured at the time of
the inauguration, the admission of water
may, perhaps, have contributed to the result.
The ground is of very slight compressibility
and permeability. The first cracks in the
bottom were probably produced by shrink-
age as is very often the case in such works,
the infiltration of water at the time of the
test causing them to ramify. The necessary
repairs should be made and the work
continued. When the water is admitted it
should be done gradually, say a metre at
a time with an interval between each ad-
dition.

Dr. Borja Castro attributed the accident
to a deficient width of base in the walls,
which brings the resultant of the downward
thrust of the walls and the horizontal thrust
of the water too near the outer angle of the
base. As a consequence the ground at the
place of the crack at the northwest corner
suffered a greater compression than was com-
patible with it. To prevent similar accidents
in future the walls in the weaker parts
should be given a greater base by means of
buttresses with a wide base or support of
screw piles. It would have been better to
have given the walls a greater slope on the
inner side, to have made the covering in
the form of truss arches instead of cyl-
indrical, and to have laid the concrete of
the bottom only after the roof was complete
and the pillars ceased to settle under the
weight of the arches. Infiltrations from the
ground above should be guarded against
and the thickness of the concrete lining
increased. The second reservoir should
only be completed after a full experience
with the first has taught what is best to do.

Dr. Bicalho (formerly constructing en-
gineer) said that the thickness of the walls
and the breadth of the foundations would
be insufficient in the case of a free reservoir,
but as these were to be embanked he consid-
ered them sufficient. In the course of
construction several satisfactory tests of
the compressibility and permeability of
the ground were made. The ground not
being perfectly homogeneous different
degrees of settlements were to be feared
when loaded with the weight of the masonry.
This difficulty could not be calculated

through its irregularity and its subjection
to no law. This unequal settling was the
cause of the crack, and this cause will be
removed when the settling has attained its
maximum. To this may be added the
fact that the masonry at the northwest
angle was new and abruptly connected with
the part of the wall which had stood over
a year, and that the pressure on the base is
greatest at this same angle. To repair the
damage he recommended provisional repairs
and tests, after which the permanent repairs
should be made, and the roof and other
works should then be completed. If cracks
continue to appear at the northwest angle it
will be proof of insufficient base in that part,
and the wall will require strengthening.

Dr. Rodrigues attributed the crack to
infiltrations from the interior to the exterior
of the reservoir. The ground is not perfectly
homogeneous and compressible, but he
would not hesitate to place a reservoir on
it. The accident was due to the laying
of the concrete bottom before the covering
was made in order that the imbuement
might the sooner take place.

Col. Roberts attributed the crack to the
slight but unequal settling of the main
walls, pillars and concrete bottom, prob-
ably aggravated by the fact that the works
were submitted to the pressure of water
before being in conditions of perfect soli-
dity. The hill is well adapted for the
purpose of a reservoir and if the mason's
work has been done as it should be done
the reservoir can be rendered impermeable
at a slight expense and can be made
perfectly safe. In his detailed report—
which we shall give in full in our next
issue—Col. Roberts attributed the unequal
settling of the wall principally to the fact
that there was an abrupt difference of
one and one-half metres in the foundation
at the northwest angle and the wall was
built up by a single offset instead of several
offsets to divide the pressure. This
caused an unequal settlement of the wall
and a consequent break at the offset. He
recommended that the wall should be
sustained by buttresses, that the thickness
of the concrete bottom should be increased,
and that the work should be completely
finished before water should again be ad-
mitted. For the upper reservoir he recommended
that the whole bottom should be puddled
with clay before laying on the concrete or
building the pillars, and that it should be
thoroughly tested before building the pillars
and roof, the plans of which he does not
approve.

Dr. Rey said that in general all works
of this character should be founded on rock,
but that the one under consideration might
be rendered serviceable.

Dr. Rebouças said that he had nothing to
add to his opinion stated in the report of the
commission.

Dr. Monteiro de Barros (constructing en-
gineer) said that small cracks had appeared
in the bottom from time to time which were
due to the unequal settling of the pillars
and to the weight of the water. Infiltration
has caused the extension of these cracks.
The walls also had not settled equally. The
cracks should be refilled and the walls at the
northwest angle should be buttressed.

Dr. Belfort attributed the accident to the
infiltration of water through the bottom into
the underlying clayey soil. The bottom
should be made perfectly impermeable.

Dr. Moraes Jardim (inspector of public
works) agreed with the opinion of Dr.
Sobragy as to the causes, to which he gave
as concurrent causes the unequal compressibil-
ity of the ground, the influence of differences
in temperature, and the swelling of the
saturated clay below the works. The works
should be completed, the cracks refilled,
and if necessary the thickness of the con-
crete may be increased. As a matter of
precaution buttresses may be constructed.

After considering these various opinions
the minister of agriculture appointed Dr.
Borja Castro to execute the necessary repairs
and to complete the work.

THE WORLD'S COFFEE CONSUMPTION.

In our issue of the 12th inst., we gave a state-
ment of the world's production of coffee at periods
dating from 1855 to 1878, compiled by Professor
Berg, associated with the management of the Java
Bank of Batavia, and published by him in a Batavia
magazine. In continuance of the valuable series
of statistics compiled by that gentleman, we now
summarize his data relative to consumption, in the
several countries into which coffee is imported.

The consumption of coffee is steadily increasing
in almost every country. The first auction sale of
coffee was held in Holland, March 16, 1666; and
for a long time Amsterdam, Bordeaux and London
were the only markets; England clinging to the
use of the berry, and indeed using it the more
—in spite of Charles II.'s edicts against coffee
houses on the ground that they encouraged sedition
and disturbed the peace of the realm, and also of
the judges declaring it to be a "common nuisance."
The Dutch, who had then almost an exclusive
monopoly of the article, gradually introduced it
into other countries, creating a demand for it that
induced them to establish plantations in the West
Indies and Surinam and that subsequently developed
new sources of production in all directions and
finally secured for it a world-wide consumption.

At first, coffee was a luxury of the wealthy
classes, and governments generally therefore
treated it as a means of revenue; and the history
of the duties imposed upon it abounds with illu-
strations of the superior productiveness of low imposts.
For example, in England the duty in 1807 was 18
8d per lb, the consumption 1,170,164 lbs. and
the revenue £161,245. The year following the duty
was reduced to 7d, and the consumption rose to
9,231,847 lbs, and the revenue to £245,856. Grad-
ually, however, as the consumption spread among
all classes, public disaffection, with high duties
compelled governments to reduce this form of tax,
until at last the popular demand for "cheap
breakfast" has caused either the entire abolition of
duty or the adoption of nominal taxes on the article.
This abrogation of the policy of exacting high
duties from coffee has, perhaps, more than anything
else promoted the rapid increase of its consumption
within the present century; but the cheapening of
brown sugar, which is essential to an extensive use
of coffee, has also contributed largely to that result,
the price of Havana raw having fallen about 60 per
cent since 1875.

For practical purposes, we are interested in tracing
the course of consumption only for a quarter of a
century past; a comparison of that breadth being
sufficient to indicate the tendencies of distribution.
That period is covered in Prof. Berg's estimates of
consumption by the several importing countries for
the average of the three years 1856-8 and 1876-8
respectively, which follow:

	1856-1858	1876-1878
Total	4,700,000	7,250,000
Norway	4,700,000	3,300,000
Denmark	4,700,000	3,300,000
Germany	4,700,000	3,300,000
Great Britain	4,700,000	3,300,000
Netherlands	4,700,000	3,300,000
Belgium	4,700,000	3,300,000
Austria	4,700,000	3,300,000
Switzerland	4,700,000	3,300,000
France	4,700,000	3,300,000
Italy	4,700,000	3,300,000
Spain	4,700,000	3,300,000
Portugal	4,700,000	3,300,000
United States	4,700,000	3,300,000
Other countries	4,700,000	3,300,000

It will be seen from Prof. Berg's estimate, that
the world's consumption has risen from 3,200,000
kilos on an average of the three years 1856-8 to
4,800,000 kilos on the average of 1876-8: an increase
of 1,600,000 kilos or 53 per cent within twenty
years. Estimating the average import value at 15
cents per lb, the annual value of the current consump-
tion is over \$160,000,000, and the increase, within
these twenty years, has been about \$60,000,000.

The differences of consumption as between the
various nations is very striking. The highest ratio
is in Holland, where the consumption is 1.2 lbs
per head, its use having nearly doubled within the
twenty years. The next highest is Belgium, which
consumes 9.1 lbs per head—a slight decrease,
however; then, in order, comes Norway, where 8.6
lbs per head is consumed; and next come the
United States, where the rate is 8.4 lbs per head.
France, which in 1856-8 used only 1.65 lbs per
head, now takes 4.3 lbs. Germany although cele-
brated for its strong black coffee, consumes only
5.1 lbs per head: which leaves the inference that
the Germans adulterate freely. In Great Britain,
the consumption is remarkable for its smallness,
averaging only 1 lb per head, against 1.11 in 1856-8.
The maximum consumption of that country appears
to have been reached in 1847 when, with several
millions less population than now, the quantity
retained for home use was 37,400,000 lbs, while
for the average of 1876-8 it was only 33,000,000
lbs. Partly, this falling off is accounted for from
the extensive use of chicory in adulterating coffee,
of which over 10,000,000 lbs of foreign is used
annually, besides a large quantity of home growth.
It seems highly probable that the difficulty of
getting pure coffee at retail has to a large extent
diverted consumption from coffee to tea; and to
this fact we must attribute the anomaly that the

reduction of the duty to 3d per lb had little effect
in augmenting the consumption. On the contrary
the reduction of the duty on tea has enormously
increased the use of that beverage. In 1856 the
duty was 15d per lb, and the consumption 65,000,
000 lbs; in 1866 the duty was reduced to 6d, and
the consumption rose to 102,000,000 lbs, since
which it has steadily gained until, in 1877, no less
than 151,000,000 lbs of tea were consumed. Thus,
while, between 1857 and 1877, the consumption of
coffee, in the United Kingdom, has declined 5½
per cent, that of tea has increased within the same
years 139 per cent. The latter fact may be accepted
as satisfactorily accounting for the former.

The relative status of the chief coffee consuming
countries ranges as follows: First the United States,
consuming 323,000,000 lbs; next Germany, which
takes 218,000,000; next France, with 110,000,000;
next Austria Hungary, with 82,000,000; next Hol-
land, with 68,800,000; and finally Belgium, with
48,600,000 lbs. These countries take 80 per cent
of the whole product of the world. England ranks
among the third rate consumers, and Russia, with
her eighty millions of people, consumes only one-
fifth of a pound per capita.

A comparison of the relative per capita consump-
tion in different countries seems to suggest the
inference that the use of coffee by any people
depends very largely, first, upon exemption from
adulteration and, next, upon the moderation of
duties. Adulteration deteriorates the popular estima-
tion of the beverage; and high duties beget adu-
lation or make the article too costly for universal use;
and hence it will be found that, as a rule, the
consumption of coffee has increased most within those
nations which have least resorted to adulterations
and have least burdened it with fiscal exactions.—
N. Y. Commercial Bulletin, April 15, 1880.

MORE ABOUT SLAVERY.

To the Editor of the Rio News.

Sir:—Your correspondent "Constant
Reader," in his eagerness to befriend Dr.
Gunning, has overshot the mark, and proved
too much.

How is it, Sir, that at a time when "the
planters and other slave-owners were gain-
ing enormously by the labor of their negroes
upon the railroad," and "the value of a
slave was soon cleared," Dr. Gunning's
negroes "did not clear themselves, but
remained on hand?" Yet they ought to
have earned their freedom if there was any
meaning in "the system devised by the good
doctor for the emancipation of his blacks,"
for they worked upon the railway! Well
might Capt. Codman remark that "these
fellows had the sense to see that with such a
master as Dr. Gunning freedom would not
be worth working for," for it seems to have
been as a "result" of this discovery that
"they worked so unprofitably that the rail-
road company dispensed with their services!"

How many of these thirty-five to forty
wretched beings, who existed in slavery when
Capt. Codman wrote his book in 1866,
have been freed up to the present date by
the "practical, negro-loving philanthropist?"

Let Dr. Gunning reserve his "modesty"
(or whatsoever other feeling "prevented his
going into this matter") and just enlighten
us on this point; and while he is about it,
let him tell us how many of the accounts
have been balanced since 1866; and when?

I am, Sir,
Your obedient Servant,
DIOGENES.

Rio, June 15th, 1880.

CANADIAN STEAMSHIP SUBSIDY.

The Dominion House, in committee of supply
upon the estimate, on Thursday considered the vote
for ocean and river service. During the discussion
the premier made an announcement in regard to
the item of \$50,000 for subsidizing a line of steamships
from Canada to Rio de Janeiro, Brazil. He said
that the Brazilian government were about to select
a building in Rio Janeiro where Canadian products,
such as were required in Brazil, could be exhibited,
and that the Canadian government were going to
procure and exhibit in Montreal specimens of such
American and British products as were exported to
Brazil, so that Canadian manufacturers could study
the class of goods with which they would have to
compete for this important trade.—N. Y. Com'l
Bulletin, May 4.

The Texas (U.S.) cattle drive for the present
year is estimated at 300,000 head. The average
prices obtained at the pastures are: yearlings, \$6;
two-year-olds and cows, \$9; three-year-olds, \$10;
heaves, \$13; or an average price of \$9.50 on all
classes. At an average of \$8.50 per head, owing to
the large predominance of young cattle and cows,
the total value of the drive will be \$2,550,000. The
average market price of the cattle will be \$11 per
head.

THE RIO NEWS

PUBLISHED TRIMONTHLY

on the eve of departure of the American packet, the French packet of the 15th, and Royal Mail packet of the 24th of the month.

Contains a summary of news and a review of Brazilian affairs, a list of the arrivals and departures of foreign vessels, the commercial report and price current of the market, a table of freights and charters, and all other information necessary in a correct judgment on Brazilian trade.

(Cash necessarily in advance)

Subscription for one year in Brazil, \$10.00
do for six months do \$6.00
do for one year in the United States, \$10.00
do for six months do \$6.00
do for one year in Great Britain, £2 0 0
do for six months do £1 0 0

All subscriptions must run with the calendar year. Back numbers supplied at this office from April 1st, 1879.

Subscriptions and advertisements received at the EDITORIAL ROOMS—8 Rua São Pedro.

Agents for the United States

C. M. COLLOCH BECHER & Co.
45 Wall Street, New York

RIO DE JANEIRO, JUNE 24TH, 1880.

In an official note to the director-general of the postoffice, of the 21st instant, the minister of agriculture calls attention to the fact that the American line of steamers have not complied with the legislative amendment to their contract requiring a call at the port of Maranhão, and directing that further payment of the subsidy shall cease. The minister also stated that the matter would be brought before the General Assembly, which was done on the following day. In this matter the minister has done no more than to carry out the strict requirements of the law, and in so doing merits all approbation. Had his predecessor acted thus decisively, it is highly probable that the whole question would have been settled long ere this. But of the law itself and the measures adopted last year to justify it, there are no words sufficiently strong for condemnation. To serve a petty whim of some trading and jealous deputies, an impossible condition is inserted into a carefully-drawn commercial contract, and the government allows it to become a law. In response to the representations of the steamship line against the practicability of making calls at Maranhão, a commission was sent to examine the port, and its report, based on a most superficial and imperfect examination, declared that there was sufficient depth of water, if not at Maranhão certainly at "other ports near that capital." And on such a truckling report and to satisfy the two-penny commerce of that port, the General Assembly deliberately breaks a contract by imposing an impossible condition. It follows therefore that a contract with the minister of agriculture and Emperor, subject to legislative revision, has no longer binding force in the empire.

One of the first acts of the new tariff revision commission has been a public invitation to the mercantile community to submit their opinions and wishes on the necessary changes in the existing schedule. It is probable that some interested parties who want more protection or those who want a special reduction in the interest of some private enterprise, will accept this invitation. It is barely possible, also, that some merchants will venture once more to suggest those changes which have been urged again and again upon the treasury department. But that there will be any spontaneous response we do not believe. In accepting the invitation of the minister of finance to organize revising committees, the merchants of this city were actuated by no other motive than the formulation of a schedule which would be just and equitable to all parties concerned. As is well known they did their work conscientiously and thoroughly; more than that, they did it intelligently. In the final revision the promise made by the inspector to place the schedule before the advisory committees for a final discussion and revision was conveniently forgotten and a tariff was put into execution which contained so few of their suggestions that it can not be considered in any sense as a part of their work. That schedule has not yet been in force six months, but it has been proved to be so glaringly imperfect that the government finds it necessary to undertake another revision. If the government is sincere in its wish to consult the merchants on this revision, it can do so most effectively by recurring again to the material placed before the last commission. There have been no radical changes in the economic state of the country since that time, and the schedule recommended then will serve every purpose now. Besides that it will not be possible to get the same results, the same elaboration of details, the

same agreement from conflicting interests, through individual and informal recommendations. It is not unlikely that the merchants will be charged with indifference if they do not reply to this invitation, and that their silence will be construed into a tacit acceptance of any revision which the commission may formulate. This, however, will be no worse than that of volunteering their opinions only to have them ultimately disregarded. Were there a positive certainty that their suggestions would be adopted, the merchants could do no more than was done one year ago, nor could they do better than to refer the present commission to the compilation of suggested changes then adopted by the various advisory committees. In view of the official traditions in favor of an increase of duties whenever the revenues prove insufficient it is not likely that there could be any harmony between the merchants and a commission composed wholly of treasury and customs officials. The merchant has seen more than one class of goods practically driven out of the market by excessive duties, and he is logical enough to know that the same causes always produce the same results.

THE RECENT visit of the Emperor and minister of agriculture to the province of Paraná is already bearing fruit. The hope had been expressed in various quarters that out of a personal observation of the existing state of industry in that part of the empire and of the most pressing needs of the people, some practical measures would be taken to meet them and to aid in the development of the country. How well this has been done will be seen in what follows. Almost immediately on his return the minister instructed the director of the government telegraph service to proceed to the necessary surveys for a telegraph line from Curitiba to Guapara. This latter place is about fifty leagues distant from Curitiba, and is a small village of a few hundred houses situated in the midst of a rich grazing region. It is at present connected with the provincial capital by the vilest kind of a mule path some fifteen or twenty leagues long, which leads into the fine road running from Curitiba to the campos gerais at Ponto Grosso. The village itself has two or three well-stocked stores, a number of *vendas*, a blacksmith's shop, a few carpenters and shoemakers, and semi-occasionally a baker. The inhabitants are for the most part *fazendeiros* who live mainly on their cattle farms and who come into town only on occasions of *festas* and elections and for obtaining supplies. The postman arrives there some three or four times a month with a single lean mail bag. The surrounding country is very fertile and exports cattle and mules in considerable numbers. The imports are general merchandise from the capital and sometimes breadstuffs from neighboring municipalities. And this is the municipality of Guapara, to which the government now proposes to construct a telegraph line. It is a distant pastoral community, whose wants are few and simple, and whose relations with the outside world are already served by three or four mails a month. Its one great commercial need, like that of the countless interior communities of Brazil, is the need of a good wagon road communication with some seaport or railway. Its first great civilizing need, like that of hundreds of towns all through the empire, is the need of schools. And yet, notwithstanding the general laws of national development through which these great needs are secured and enjoyed long in advance of the more costly needs of larger and more highly civilized communities, the government finds nothing more urgent than the luxury of a telegraph line. In the natural growth of a country we should expect to find good wagon roads in advance of railways, good schools and efficient postal communication in advance of telegraph wires. And yet, after visiting the wretched schools of Paraná and travelling over its few wretched roads, the minister concludes that the first great need of that province is a telegraph wire to Guapara. It does not appear that the cattle and mules of that district are suffering for the want of telegraph messages, nor that the people will have bread more frequently when the whirl of the telegraph instrument is heard in their quiet streets. Between Guapara and the outside world will remain the same old mule path, and the cost of importing and exporting goods will

be no less when the Curitiba merchant can send the electric message "two mule loads of tobacco, calico and sundries just dispatched to Guapara." We remember a small town in the United States of about the same size as Guapara. It is situated in the centre of a thriving farming district many times more populous than its Paraná counterpart, and its trade was much more varied and thriving. It possessed several small industries and a well-filled mail bag was received every day. As the lines of a wealthy telegraph company passed within a mile of the town, the directors of the company were led to believe that a station could be maintained there, and a branch line and office were opened accordingly. The experience of a few months proved, however, that the receipts of the office were not sufficient to pay even the small salary of one operator and to maintain an exceedingly modest office, and the enterprise was therefore abandoned. And all that happened in a country where wagon roads ran everywhere, where railways were within easy reach, where traveling was easy and cheap, where postal facilities were cheap, and where newspapers and personal intercourse with the outside world all tended to widen the horizon of the little town and increase its daily wants far beyond the compass of its own production. In view of this experience what can be said of the necessity of telegraphic communication with Guapara? If the receipts of that office from private and commercial telegrams are sufficient to keep the battery cells supplied with acid, the results of the enterprise may be considered abundantly satisfactory; more than that can not be expected. It is to be regretted therefore that the minister of agriculture has not undertaken some enterprise which will contribute more directly to the development of Paraná and which will not be an unprofitable drain upon the imperial treasury.

EXPORT TAXES.

One of the chief considerations which should occupy the attention of the commission lately appointed to revise the tariff as a subject for recommendation, and of the General Assembly as a subject for early revision, is that of the duties on exports. In view of the universal testimony of the best political economists and of the experience of other nations it is clear that the imposition of a tax on exports is unwise and prejudicial in the highest degree. As a rule it is a direct tax on the productive energies of a country, and therefore a check upon its development. In this sense it can not be otherwise than a grievous burden upon the people. It lessens the profits of the agriculturist and manufacturer even where it does not wholly destroy their industries, and in just that degree it hampers industrial growth and diminishes the productive capital of the country. In a certain school of political economists it is believed that this tax on exports comes out of the pocket of the consumer and is therefore no burden upon the native producer. These same men also claim that the tax on imports is paid by the foreign producer. From this it would seem that their fundamental theory in the imposition of export and import duties is that the foreigner always pays the tax—a theory whose contradictory hypotheses rule it out of all rational consideration.

The only basis upon which such a theory can be based is that of non-competition. If Brazil were the only coffee-producing country in the world, it could then be claimed with some reason that the foreign consumer pays the export tax; but, as Brazil produces less than one-half the total annual product of the world and as some other countries, notably the Central American states, are gaining very rapidly as coffee producers, it is evident that the consumer has the control of the market and therefore shifts the tax upon the producer. It should be borne in mind that it is no longer possible for the Brazilian planter or coffee broker to dictate prices to consuming markets. On the contrary, the coffee-consumers are now in a position to fix prices for themselves, subject to the general laws of supply and demand. It follows, therefore, that every competitor in the production of coffee strengthens the position of consuming markets and weakens that of those countries which formerly enjoyed a practical monopoly as producers. Besides that, every improvement in the cultivation

of coffee and in its preparation for market lowers the price in consuming markets.

The position now occupied by Brazil as a coffee-producing country is one of unusual interest. From the statistics given in our last issue of the coffee production of the world it will be seen that while the total product between the years 1855 and 1878, inclusive, increased 47½ per cent., that of Brazil increased only 38 per cent. This proves that Brazil is falling behind. How much of this is due to the baleful effects of the export tax we leave the Brazilian legislator to determine. The time has now come when some intelligent effort should be made to recover this lost ground. If it is possible for the Central American states to increase their product 800 per cent. while Brazil is increasing hers 38 per cent., it will be possible for this new competitor to eventually win the supremacy in consuming markets. With this contingency threatening her, Brazil should lose no time in relieving her coffee planters from every artificial burden, and to grant them all legitimate assistance in their efforts to reduce the cost of production. And this can only be done through the abolition of export duties, a reduction in the cost of transportation, and the early and total abolition of slavery.

With respect to the other products of the country, the necessity for the early abolition of all export duties is even more imperative. The production of cotton, once so important and promising, has been killed, while that of tobacco and sugar has been practically repressed or handicapped by these taxes, and shut out from that larger development which the conditions of soil and climate in Brazil have made possible. Aside from the pecuniary advantages involved in the encouragement of these industries there are others which have a vital interest to the country. Profitable as may be the production of coffee there is great danger in its exclusive cultivation. With such a variety of soil, Brazil should be limited to no one nor half-dozen productions. Instead of importing cured meats, rice, corn, potatoes, beans, and many other necessities, from foreign countries, all these products should be produced at home. More than that, these productions should be a source of profit to small farmers who are now almost wholly unknown. Were the government to abolish all export duties and reduce the present high freight rates on the lines under its control, the cost of placing tobacco, sugar and cotton in consuming markets would be greatly reduced and an eventual increase in the production of these products would certainly follow. Abolish then the unwise policy of granting special aids to the few petted industries and not only would the expenditures of the government be reduced but there would ultimately follow a safe and highly desirable development in the number of small producers who are now unjustly repressed by official discrimination. This would lead to the final development of the many small industries which are now neglected.

It does not follow that all these desirable results would be attained by the simple abolition of export taxes. There are other economic reforms which the necessities of the country imperatively demand and which must be secured before the way will be clear to the highest development of Brazilian agriculture. It is not possible, however, to change everything at one legislative act; the burdens can be cut off only one by one, and among the first to fall should be this suicidal tax on exports.

LEGISLATIVE NOTES

The sessions of the Senate and Chamber of Deputies have been considerably interrupted since our last report, and the work done has been largely of a routine and private character. In the Senate very little of consequence has happened. In the Chamber the estimates for the department of empire entered on second discussion on the 16th and have been up nearly every session since. The electoral reform bill entered on its third reading on the 19th, and on the 21st a large number of amendments to it were presented.

In response to an interpellation of Senator Cordeiro in regard to the granting of premiums to the Jockey Club of this city by the government, the ministry announced on the 19th that the premiums heretofore conceded amounted to 9,663, that they were taken from the receipts of the Dom Pedro II railway, but that the present government had revoked the concession and the premiums would be no longer paid. In congratulating the ministry on this step Senator Cordeiro took occasion to thank the minister of agriculture for the recent steps taken for the extension of a telegraph line from Curitiba to Guapara, province of Paraná.

—The late petty disturbance in Porto Alegre, Rio Grande do Sul, over the rejection of a drainage contract by the provincial assembly, was brought before the Senate on the 9th by Senator Cordeiro. He asked for copies of the contract which proved so objectionable as to excite the disturbances. The same subject was brought before the Chamber by Deputy Fernando Osorio and excited considerable discussion during the 18th and 19th.

—In reply to an interpellation on the 21st inst., Minister Buarque de Macedo stated that when the present ministry assumed office he found that the appropriations for colonization had been already exceeded by 1,300,000\$. The government at once reduced expenditures in that department and abolished official colonization. He would ask for a special credit of 1,300,000\$ in a few days to enable the government to emancipate all the colonies during the year, to lay out lands and make roads.

—It transpired in a discussion on an interpellation by Senator Cordeiro on the 22d inst., that the government had thrown out all tenders for the improvement of the port of Santos, and had turned over that important work to the province of São Paulo. The minister of agriculture had ordered the tenders and deposits to be returned to the parties interested.

LOCAL NOTES

—It is proposed to erect a monument to the late Duque de Caxias.

—The customs inspector of this port has been authorized to increase the number of general dispatchers to 110.

—The Italian packet *L'Unità* which arrived from Genoa on the 15th inst., brought out 552 steerage passengers, 224 of which went on to the River Plate.

—Clemente do Amaral was brought to trial on the 16th inst. for striking Antonio Francisco de Macedo on the 6th of May, 1878—over two years ago. He was discharged.

—The *Vital de Oliveira* has been instructed to return home from Hong Kong, China, immediately. The return voyage will be by way of S. Francisco, California, and Cape Horn.

—The civil engineers of this city propose to make a demonstration on the arrival of the composer, Carlos Gomes. One is led to think that the illustrious musician is an engineer also.

—The government has directed the president of Bahia to proceed against the late *fel* of the internal revenue office of that province for the crime of counterfeiting revenue stamps. The amount involved is 30,000\$.

—An official report of the 10th inst., concerning the late epidemic of yellow fever at Vassouras, in this province, says that it is now quite extinct. Since the breaking out of the fever in April there have been 70 cases and 28 deaths.

—The minister of marine has granted the request of the students to the effect that a transport should be placed at their disposal to go out to meet Carlos Gomes. It does not transpire who pays for the cost.

—It is said that the Emperor proposes to make a trip into Minas after the inauguration of the Barbacena railway station. It is not known whether the imperial *convite* on the Paraná trip will be quite ready by that time.

—One of the unexpected results of the tardily discovered fame of Camões is seen in the name of a mutual benefit association just organized. It was first proposed to call it the Associação Portuguesa de Socorros Mtuos Tricentenários Luiz de Camões, but it has since been decided that the title Associação Portuguesa de Beneficência Memória a Luiz de Camões is slightly more euphonic. It seems that the vincible spirit which persecuted the poet in life, still seeks to persecute those who speak his language three hundred years after.

—A cheerful *folhetimista* undertook, the other day, to write a criticism of *Dora*, one of Sandoz's dramas recently put upon the stage in this city. Naturally the ordinary play-goer doesn't see much in the common run of dramas to invite a column and more of erudite criticism and reflection, but that's just the difference between our critic and the common run of mortals. He started out first with the Franco-Prussian war and a flattering allusion to Cesar and his *Commentaries*. He then crossed the Rhine and gave us an insight into the cabinet secrets of Prince Bismarck, whom he led about by the nose in the most heroic fashion. He then made a brilliant jump back into the shadowy beginnings of our race, to the Aryans of the Persian table lands, from which he drew instructive lessons about the fall of Napoleon III and the state of modern society. It then occurred to him to say something about *Dora*, after which he plunged into a discussion of the inner social life of the French people, and of one of its peculiar features, the *espionnage*, out of which springs the plot of this drama. He then wandered off into some reflections on another drama whose plot he demonstrated to be as applicable in Pekin and Melbourne, or among the Samoyeds and Mandchurians as in Paris, and brought up in a discussion of Brazilian literary journalism. This refreshed he again returned to *Dora*, whose career he followed until he caught sight of a favorite French actress, when away he rushed again to give us an erudite discussion of the stage. Things got just a little mixed at this point, but the reader could be sure that it was going all right from the stage landmarks—Ophelia, Desdemona, Juliet and Lucy Macbeth. Recovering himself again, our critic then, at the end of one column, took up the leading actress' representation of *Dora*, to whom he gave credit for speaking good Portuguese. At this point there was a brief reference to another French actress, and then one of the actors received a compliment for his correct diction, and a reprimand for his manners, standing with his feet at an angle of 60° and "ready to begin a solemn march to the sound of funeral harmonies." There's something in theatrical criticism, after all!

THE RIO THEATRIANS.

This English amateur dramatic association gave, under the direction of Mr. R. K. Benjamin, two of their entertaining performances, at the Theatro S. Luiz, on Monday and Tuesday evenings, in aid of the British Educational Fund and the *Aylo dos Meninos Desvalidos*. The list of stewards embraced the names of many prominent Brazilians, Englishmen and Americans, and the first performance was honored by the presence of the Emperor and Empress.

The performance commenced with Morton's comedy, "On the Sly," in which Mr. Benjamin played the prosy part of *Dibbits* acceptably; Mr. Mathias made the most of *Major Grauler*, and Mr. Markland rendered the character of *Mrs. Dibbits* as gracefully as could have been expected under the circumstances, but the movement was slow throughout and it was evident the young gentlemen did not enter into it with vim.

This was followed by some good music by the orchestra, when the curtain rose on "William Tell," by Henry J. Byron. This amusing musical burlesque, with new songs and music composed and arranged by Mr. Benjamin, elicited rounds of applause and kept the house in a good humor through all the five acts. Mr. S. Oliver made his first appearance as a member of the company, and rendered the part of *Albert Tell* with an easy, airy manner, not much exaggerated, that elicited the commendation of the audience. Messrs. Mathias, Swanick, Fry, and Markland, acted most spiritedly in the characters of *Gessler*, *Sarnen Tell*, and *Emma*, while Mr. Benjamin sustained the trying part of *Rosetta* with cleverness. A topical song by *Rosetta* might have been modified, as a matter of taste, out of consideration to the presence of the guests of the evening. Mr. Fitzhugh's absence was noted by the audience, but his clever administration was observed in the orderly movement and arrangement of everything in the manager's department.

The audience was composed, as usual, of the families of the English and American community, and left the theatre at the conclusion of the performances, pleased with an entertainment which is now an established institution among us.

[We go to press too early to notice the performance of Tuesday evening.—Ed.]

PROVINCIAL NOTES.

—Counterfeit 200\$ notes are reported from various parts of Rio Grande do Sul.

—A popular demonstration at Porto Alegre on the evening of the 14th, brought out some 10,000 people.

—The Rio Grande papers are still complaining of the bad administration of the postoffice in that province.

—The docks at Rio Grande have cost thus far 1,100,000\$, including interest on bonds, administration, etc.

—The *Liberdade*, of Pernambuco, has suspended publication. It was the official organ of the liberal party in that province.

—The customs receipts at the port of Santos in May were 401,391\$595, including 1,748\$718 deposited, and 368 for the emancipation fund.

—The epidemic at Canguçu, Rio Grande do Sul, has subsided and the medical commission sent to the assistance of the town has returned to Porto Alegre.

—The receipts of the São Paulo postoffice in May were 21,734\$300, expenditures 15,497\$855. Balance in favor of the provincial postal department, 6,236\$445.

—The managers of the Santos railway line gave an entertainment to the employees of that road at the São Paulo Hippodrome on the evening of the 19th inst.

—The province of Rio Grande do Sul imposes a tax of 500\$ on every slave brought into the province for sale, and 250\$ on every slave sold for export or exported for sale.

—The public debt of the province of Rio Grande do Sul on the 31st of December last was 2,932,387\$67. Of this sum 2,077,148\$949 draws 6 per cent., and 439,317\$ draws 7 per cent. interest.

—The Barbaena station contractor, Cesar Paralelo, after receiving the amount of his contract, suddenly disappeared. His many creditors in Barbaena feel somewhat concerned about his safety.

—The Commercial Association of Pelotas, Rio Grande do Sul, has petitioned the government against the annulment of the present free coasting trade laws.

—The Commercial Association of Porto Alegre, Rio Grande do Sul, has addressed a protest to the General Assembly against the repeal of the existing laws which permit foreign vessels to engage in the coasting trade.

—Late mail advices from the province of Paraná report that the Indians are making incursions into the settlements on the Rio Negro. Unlike ordinary savages these Indians have a taste for money, and have therefore taken to highway robbery.

—Porto Alegre is undergoing an infliction of new street numbers at a cost to the house owners of 1\$700 to each number.

—Some bright young fellows near Campinas, while celebrating the day of their patron saint S. Antonio with fireworks, left a bottle of powder near a bonfire. They are now extracting pieces of glass from their bruised bodies.

—The slave Bernardino, tried for the murder of the German, Schroeder, at Campinas, some months since, was condemned to 12 years' imprisonment with hard labor. This sentence was afterwards commuted to 3 years' imprisonment in irons fastened to the neck.

—The provincial budget of Rio Grande do Sul estimates the receipts of that province during the year 1880-81 at 2,279,400\$ and the expenditures at 2,338,228\$188. This leaves a deficit of 48,828\$188 which the provincial president is authorized to meet by a loan.

—The city council of Santos, on the 17th inst., entered into a contract with Thomaz Antonio de Azevedo for the construction of a temporary market. The amount appropriated is 10,400\$, and the work must be completed in four months from the signing of the contract.

—The *Atividade* of Ouro Preto, Minas Geraes, of the 16th inst., mentions the arrest in various parts of that province of thirty men accused of murder or attempt to murder. Thirteen of them were Italians who together killed two men at S. José do Pucó on the 5th and 6th ult.

—Francisco Antonio de Padua killed his brother Antonio Francisco, at Bananal, S. Paulo, on the evening of the 4th inst. The deed was committed with a knife on the public road and in presence of the assassin's wife. This is the third fratricide in that locality with a space of two years.

—A civil marriage recently took place in Maranhão between a Danish subject and a Brazilian lady. The couple applied to the ecclesiastical authorities for the usual dispensation. Difficulties arising and as the church men were over-scrupulous about the matter, the couple went before the British consul and were married.

—The Porto Alegre "Florida water" manufacturers, Leão & Alves, have asked the provincial assembly of Rio Grande do Sul to grant them exemption from the 25 per cent. impost on rum used in the manufacture of perfumery. The high tariff on the imported Florida water does not seem to be sufficient protection.

—A miraculous sweating monument has been discovered in the municipal cemetery of Rio Claro. Of course, miraculous cures have been effected by the water from it and the easily-deceived miracle worshippers are busily employed in collecting the precious liquid. It is said to be specially efficacious in cases of rheumatism. The miracle will probably disappear with a change of temperature.

—A horrible assassination took place at Santa Isabel do Rio Preto on the night of the 11th inst. As Francisco Antonio Martins was returning to his fazenda, he was attacked by a party of his own slaves just as he was about to open a gate. The blacks had fastened the gate purposefully and were awaiting him in ambush. They attacked him with hoes and scythes, killing him instantly and horribly mutilating his body.

RAILROAD NOTES.

—The receipts of the "Nietheropy a Campos" railway in May were 19,141\$630.

—The gross earnings of 36 American railways, with a total extension of 23,419 miles, during the first four months of the present year, were \$54,568,585—an increase of 25 per cent. over the same period of last year.

—The inauguration of the railway station at Barbaena, Minas, on the Dom Pedro II line, will take place on the 27th inst. The line will then have been opened about one month, waiting for the attendance of the Emperor to formally inaugurate it.

—A meeting of the shareholders of the Sorocabana railway company was held in this city on the morning of the 21st inst. After a brief discussion it was resolved to elect a commission to examine the company's books and to prepare a report on them.

—Dr. Francisco Picapou, one of the editors of the *Revista da Engenharia*, has been appointed resident engineer of the Baturité railway. The *Revista* will remain under the editorial charge of Dr. José Americo dos Santos, under whose intelligent management it has made such gratifying progress thus far.

—The published returns of the "Bahia ao S. Francisco" railway for April show that the total receipts of the road were 31,825\$820 and the expenditures 38,706\$210, leaving a deficit of 6,880\$390. The number of first-class passengers carried was 998½, second-class 4,465½. The freight traffic included 139 tons of sugar and 131 tons of tobacco.

MAURICIO SWAIN,
Mechanical Engineer
CURITYBA, PROV. OF PARANÁ.

THE GROCER.

Published every Saturday
at No 13 West Broadway,
NEW-YORK

Contains weekly retail and wholesale prices-current, market and crop reports, trade reviews, and summaries, and all other information necessary to a full and correct knowledge of the special trade of which it is the accredited organ.
Subscription (in New-York): \$2.00 per annum

C. Mc CULLOCH BEECHER & COMPANY
Export and Commission Merchants.
41 AND 43 WALL STREET
NEW YORK
P. O. Box No. 2354

Facilitate the introduction into Brazil of American products, Machinery, Agricultural Implements, Railroad Supplies, Manufacturers' goods, Hardware, Dry Goods and specialties generally suitable for or adaptable to the requirements of that country, by furnishing reliable information regarding the special modes of procuring and packing merchandise, so essential to their profitable exportation there, and by means of their Rio de Janeiro house, bringing the American Producers and Manufacturers into direct communication with the Brazilian merchants.

ENGLISH BANK
OF
RIO DE JANEIRO
(LIMITED)
HEAD OFFICE IN LONDON
BRANCHES:
RIO DE JANEIRO, PERNAMBUCO AND SANTOS

Capital £ 1,000,000
Dito, paid up £ 500,000
Reserve Fund £ 500,000
Dito, against depreciation of capital £ 64,444.5. 11
Draws on the London Joint Stock Bank and transacts every description of Banking business.

RUBBER HAND STAMPS
For Merchants, Bankers, and for all business purposes, are taking the place of every other kind of hand stamp.
For marking clothing, table linen, etc., with indelible ink.
The Consecutive Rubber Dating Stamp for Bank and Office use.
Monograms, autographs, etc., made to order.
S. T. LONGSTRETH, Manufacturer,
8 Rua de S. Pedro, RIO DE JANEIRO

UNITED STATES AND BRAZIL S. S. LINE.

Carrying the United States and Brazilian Mails,
Performs a regular monthly service between New York and Rio de Janeiro, stopping at the intermediate ports of St. Thomas, Pará, Pernambuco and Bahia. The steamers of this line, 3,500 tons measurement each, are new and first-class in every particular.

Steamers will arrive and clear at this port as follows:

Steamer	Commander	Arrive	Depart
City of Pará	Capt. Cowell	May 28	June 5
Rio Grande	Capt. Lewis	June 28	July 5
City of Pará	Capt. Cowell	July 28	Aug. 5
City of Rio de Janeiro	Capt. Lewis	Aug. 28	Sept. 5

Fare between New York and Rio de Janeiro, 1st. class \$75.
General and Passage Office,
WILSON, SONS & Co., Limited.
No. 3 Praça das Marinhas.

ROYAL MAIL STEAM PACKET COMPANY

Under contract with the British and Brazilian Governments for carrying the mails.

TABLE OF DEPARTURES,
1880

DATE	STEAMER	DESTINATION
June 14	Tamir	Southampton and Antwerp via Bahia, Macao, Pernambuco and Lisbon.
July 9	Minho	Southampton and Havre via Bahia, Pernambuco, S. Vicente and Lisbon.

For freights and passages apply to
E. W. MAY, Supr.,
Rua 1ª de Março No. 42.

LIDGERWOOD MFG. CO., (LIMITED).

Successors of
MILFORD & LIDGERWOOD,
Engineers, Machinists,
Importers of Machinery and Material for Agricultural and Industrial Establishments, and Cotton and Woolen Mills.

GENERAL AGENCY FOR THE

SINGER SEWING MACHINE,

COFFEE-CLEANING MACHINERY.
No. 95, Rua do Ouvidor.

C. T. DWINAL

34 RUA DA QUINTANA
Agent for the

"DOMESTIC" and

GROVER & BAKER

SEWING MACHINES

N. B.—Every article pertaining to Sewing Machines and their use constantly on hand.

AMERICAN BANK NOTE CO.

OFFICE: 112, BROADWAY, NEW YORK.

ENGRAVES AND PRINTS

BANK NOTES, BONDS FOR GOVERNMENTS AND CORPORATIONS, BILLS OF EXCHANGE, CERTIFICATES OF STOCK, POSTAGE AND REVENUE STAMPS, POLICIES OF INSURANCE, AND ALL KINDS OF SECURITIES

In the most artistic style, and in a building proof against fire

New York, February 6, 1880.
At a meeting of the Board of Trustees held this day, the following gentlemen were elected officers of this Company under its constitution with the National and Continental Bank Note Companies:
A. C. GOODALE, President.
JAS. MACDONOUGH, Vice-President.
J. T. ROBERTSON, Treasurer.
THEO. H. FRIELAND, Secy.
I. K. MYERS, Asst. Secretary.

C. P. MACKIE & Co.
PHILADELPHIA, Pa., U. S. A.
Materials and supplies for
Railroads,
Street Tramways,
Plantations, and
General Engineering Work

Locomotives, Cars, Bridges, Turntables, Switches, Car fittings, tools and railway equipment of all kinds.
Street cars, frogs and crossings, shop supplies.
Machinery, engines and portable railroads &c. for sugar and coffee plantations and mines.
Hydraulic machinery, and appliances.
Estimates and Plans for special work furnished in application.
All orders filled at manufacturers' own prices, and all work thoroughly guaranteed.

AGENTS IN BRAZIL
For the following manufacturers.

THE GILBERT & BUSH Co.

TROY, N. Y., U. S. A.

Railroad cars of every description, and of the best material.
Street cars of the most serviceable quality, and elegant designs.
Special attention given to foreign work.

THE WHARTON RAILROAD SWITCH CO.

PHILADELPHIA, Pa., U. S. A.

Safety railroad switches, frogs and crossings.
Street railway work of all kinds.

LEHIGH CAR WHEEL WORKS

CATASAUQUA, Pa., U. S. A.

Chilled iron car wheels for passenger, freight and street cars.
Chilled iron castings of all kinds.

EDGE MOOR IRON Co.

WILMINGTON, Del., U. S. A.

Light portable railways for plantations and mountainous districts.

H. K. PORTER & Co.

PITTSBURGH, U. S. A.

Light Locomotives for narrow gauge and plantation railways, of any gradient up to 8 per cent.
Will burn any fuel.

HOOKS SMELTING Co.

PHILADELPHIA, Pa., U. S. A.

Trimings and fittings for railway and street cars.
Tools and machine supplies of all kinds.
Telephone materials.

CULMER SPRING Co.

PITTSBURGH, Pa., U. S. A.

Railroad and street car springs of all descriptions.

THE WESTINGHOUSE AIR BRAKE Co.

PITTSBURGH, Pa., U. S. A.

Manufacturers of the Westinghouse Automatic Railway Brakes.
Instantaneous stoppage of railway trains from any car, or from the engine.

GEO. K. TRYON, SON & Co.

PHILADELPHIA, Pa., U. S. A.

Anti-friction journal bearings for railroad and street cars and general machinery, of phosphor-bronze, babbit metal and brass.
Bronze work of all kinds.

THE JOHN A. ROEBLING & SONS Co.

TRENTON, N. J., U. S. A.

Iron and steel rope, wire netting, telegraph wire, &c. Sus pension bridges of all sizes.
Manufacturers of cable for S. Thoren Inclined Plane.

JANNEY CAR COUPLER Co.

The simplest, safest and most economical system of couplers and buffers for freight and passenger cars.

BLAKE ORE CRUSHER Co.

Stone and ore breakers for use with steam, animal or hand power.
For mines, railroads and road-making generally.

THE HOLLY MANUFACTURING Co.

LOCKPORT, N. Y., U. S. A.

Constructors of water works, pumping, draining and irrigating machinery.

RIO DE JANEIRO
115 RUA DA QUINTANA

C. Mc CULLOCH BEECHER & COMPANY
Import and Commission Merchants
47 RUA DO GENERAL CAMARA
RIO DE JANEIRO
Caixa no Correio No. 195.

Receive consignments of American products, Machinery, Agricultural Implements, Manufactured Goods, Hardware, etc., etc., subject to the approval of their New York house, for the prompt and satisfactory handling of which they possess unrivaled facilities.

THE NEW LONDON AND BRAZILIAN BANK
(LIMITED)

HEAD OFFICE: LONDON

BRANCHES:

LISBON, OPORTO, PARÁ, PERNAMBUCO, BAHIA, RIO DE JANEIRO, RIO GRANDE DO SUL, AND MONTEVIDEO.

Capital £ 1,000,000
Capital subscribed £ 500,000
Capital paid up £ 450,000
Reserve fund £ 40,000
Depreciation of capital fund £ 40,000

Draws on:

Messrs. GLENN, MILLS, CURRIE & Co., LONDON.

Messrs. MALLET FRERES & Co., PARIS.

Messrs. J. H. SCHROEDER & Co., HAMBURG.

BALDWIN LOCOMOTIVE WORKS,
PHILADELPHIA, PENN.

(Established 1839)

BURNHAM, PARRY, WILLIAMS & Co., Proprietors.

These locomotives are adapted to every variety of service, and are built according to standard gauges and templates. Like parts of different engines of same class perfectly interchangeable.

Passenger and Freight Locomotives, Mine Locomotives, Narrow Gauge Locomotives, Steam Street Cars, etc., etc.

All work thoroughly guaranteed.
Illustrated catalogue furnished on application of customers.

Agent for Brazil,
O. C. JAMES,
No. 8, Rua São Pedro,
Rio de Janeiro.

JACKSON & SHARP COMPANY

WILMINGTON, DEL.

Manufacturers of all styles and qualities of Passenger, Mail and Freight Cars.

This establishment is one of the largest in the United States, and has furnished the cars for nearly all the narrow gauge railroads in the United States and Cuba. The cars of the São Paulo and Rio de Janeiro railways, the Itaboraí, the Niterói, the Nicholson, and other narrow gauge railways in Brazil are from this well-known works.

CHAS. S. HOWLAND, President

AGENT FOR BRAZIL,
O. C. JAMES & Co., Rua São Pedro,
Rio de Janeiro.

A. WHITNEY & SONS,
CAR WHEEL WORKS.

(Established 1847)

CALLOSVILLE STREET, SIXTEENTH TO SEVENTEENTH STREETS PHILADELPHIA, PENN.

Chilled cast iron wheels (stocked by the Hamilton process) for railroads, street cars, and mines. Axes of iron or steel.
Illustrated catalogue furnished on application of customers.

Agent for Brazil,
O. C. JAMES,
8 Rua São Pedro,
Rio de Janeiro.

THE RIO NEWS
Published three times a month for the American and European mails.

In entering upon the second year of their publication of this journal, the publishers beg leave to call the attention of the English-speaking residents of Brazil, and all persons interested in the trade of that country, to the results which they have already accomplished. In the brief space of time since their assuming charge of this journal, they have succeeded in making it an authority in commercial matters, and a reliable exponent of the events and tendencies of Brazilian political and social life upon which the security of commercial and financial investments so intimately depend.

For the coming year the same course will be preserved, together with such improvements as it may be possible to make from time to time in the commercial department. No efforts will be spared to secure the earliest and most reliable information on all matters affecting Brazilian trade. The market reports will be prepared by experts whose sources of information will enable them to give the briefest possible space an exact epitome of the market.

In its treatment of current events the News will seek only to give an exact idea of the acts and tendencies of the government and people in order that business men may be enabled to know the prospective risks of their investments.

TERMS:

One year's subscription 20\$000

Advertisements, 25¢ per inch per quarter.

Business cards, ½ inch, 25¢ per quarter.

All subscriptions should run with the calendar year.

BUSINESS OFFICE AND EDITORIAL ROOMS:
—8 Rua São Pedro.

POST-OFFICE ADDRESS:—Caixa no Correio, No. 284